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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/695,194 10/28/2003		Denis Francois Hochstrasser	A36054-PCT-USA-A 072874.0	4418	
38485	7590 09/11/2006		EXAMINER		
ARENT FO		SWARTZ, RODNEY P			
NEW YORK,	· · · · · ·		ART UNIT	PAPER NUMBER	
· · · · · · · · · · · · · · · · · ·			1645 DATE MAILED: 09/11/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No.	Applicant(s)				
Office Action Summary		10/695,194		HOCHSTRASSER ET AL.				
		Examiner	Art Unit					
	•		Rodney P. Swartz, Ph.D.	1645				
	The MAILING DATE of this commu	nication app		1	dress			
Period fo		aaaoapp	cars on are gover sneet war are	oonespondence de	Ju/ 033			
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD F CHEVER IS LONGER, FROM THE N isions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this come period for reply is specified above, the maximum si re to reply within the set or extended period for reply reply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	MAILING DA s of 37 CFR 1.13 munication. tatutory period w y will, by statute,	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS fro cause the application to become ABANDON	ON. timely filed m the mailing date of this of IED (35 U.S.C. § 133).	·			
Status								
1) 又	Responsive to communication(s) file	ed on 24 Au	iaust 2006					
· —			action is non-final.					
	rosecution as to the	e merits is						
,_	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims		, , ,					
4)⊠	4)⊠ Claim(s) <u>1-6,8-38 and 40-47</u> is/are pending in the application.							
-	4a) Of the above claim(s) <u>20,23-28 and 47</u> is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.							
	6)⊠ Claim(s) <u>1-6,8-19,21,22,29-38 and 40-46</u> is/are rejected.							
	7) ☐ Claim(s) is/are objected to.							
8)⊠	Claim(s) <u>1-6,8-38,40047</u> are subjec	t to restriction	on and/or election requirement.					
Applicati	on Papers							
9)□ .	The specification is objected to by th	e Examiner	·.					
·	The drawing(s) filed on is/are			Examiner.				
	Applicant may not request that any obje	•	•					
	Replacement drawing sheet(s) including	the correction	on is required if the drawing(s) is o	bjected to. See 37 C	FR 1.121(d).			
11) 🔲 .	The oath or declaration is objected to	o by the Exa	aminer. Note the attached Offic	e Action or form P	TO-152.			
Priority u	nder 35 U.S.C. § 119							
	Acknowledgment is made of a claim ☐ All b) ☐ Some * c) ☐ None of:	for foreign	priority under 35 U.S.C. § 119(	a)-(d) or (f).				
•	1. Certified copies of the priority	documents	have been received.					
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies	of the priori	ity documents have been receiv	ed in this National	Stage			
	application from the Internation	nal Bureau	(PCT Rule 17.2(a)).					
* S	ee the attached detailed Office action	n for a list o	of the certified copies not receive	red.				
Attachment	(s)							
	e of References Cited (PTO-892)	TO 646	4) Interview Summar					
3) 🔲 Infom	e of Draftsperson's Patent Drawing Review (Fnation Disclosure Statement(s) (PTO-1449 or No(s)/Mail Date		Paper No(s)/Mail I  5) Notice of Informal  6) Other:		O-152)			
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### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 August 2006 has been entered.

Claims 1-6, 8-22, 29-37, 40-43, 45, and 46 have been amended. Claims 7 and 39 have been canceled.

Claims 1-6, 8-38, and 40-47 are pending. Claims 20, 23-28, and 47 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention.

2. claims 1-6, 8-19, 21, 22, 29-38, and 40-46 solely drawn to a method and kit for diagnosis of TSE using polypeptide are under consideration

## **Rejections Withdrawn/Moot**

- 3. The rejection of claim 7 and 39 under 35 U.S.C. 112, first paragraph, scope of enablement for utilizing any/all other body fluids or utilizing any other component having a molecular weight in the range of 1000-100000, is most in light of the cancelation of the claims.
- 4. The rejection of claim 7 and 39 under 35 U.S.C. 112, second paragraph, indefiniteness for "determining whether the test amount is consistent with a diagnosis of TSE", is moot in light of the cancelation of the claims.
- 5. The rejection of claim 1-6, 8-10, 16, 19, 21, 22, and 37 under 35 U.S.C. 112, first paragraph, scope of enablement for utilizing any/all other body fluids or utilizing any other component having a molecular weight in the range of 1000-100000, is withdrawn in light of the amendment of the claims.

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6. The rejection of claims 1-6, 8-19, 21, 22, 29-38, and 40-46 under 35 U.S.C. 112, second paragraph, indefiniteness for "determining whether the test amount is consistent with a diagnosis of TSE", is withdrawn in light of the amendment of the claims.

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# Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-6, 8-19, 21, 22, 29-38, and 40-46 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for specific increase/presence/absence/decrease of specified proteins for specific TSE diseases, does not reasonably provide enablement for scope of the instant claims. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Enablement requires that the specification teach those in the art to make and use the invention without undue experimentation. Factors to be considered in determining whether a disclosure would require undue experimentation include (1) the nature of the invention, (2) the state of the prior art, (3) the predictability or lack thereof in the art, (4) the amount of direction or guidance present, (5) the presence or absence of working examples, (6) the quantity of experimentation necessary, (7) the relative skill of those in the art, and (8) the breadth of the claims.

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The nature of the invention is a method of diagnosis of any/all TSE comprising subjecting a sample of CSF, blood, plasma, or serum from a subject to mass spectrometry, thereby determining the amount of a polypeptide in the sample, comparing the amount to that observed in normal CSF, blood, plasma, or serum, wherein an increase or decrease in the polypeptide in the subject's body fluid compared to the reference indicates any/all TSE in the subject.

The state of the prior art as recited by applicants' own specification indicates that the claimed methods of determining new non-invasive TSE markers in body fluids accompanying new methods of determining the markers do not exist.

The predictability or lack thereof in the art indicates that diagnosis of any/all TSE using specific protein profiles in the CSF, blood, plasma, or serum of TSE patients is uncertain.

The amount of direction or guidance present in the instant specification is not commensurate with the scope of the instant claims. The working examples provided by the instant specification shows that very specific profiles are indicative of CJD and BSE. However, since there is no comparison of samples with any other disease states, it is unclear how specific the profiles are for either CJD or BSE. The instant specification does not show that the mere increase/presence/absence/decrease of specified proteins is indicative for all TSE diseases. For example, for CJD the profile is as follows:

## **Profiles positive for CJD compared to normal levels**

- 1) decrease in values 3295, 3970, 3976, 3990, 3992, 4294, 4300, 4315, 4436, 4478, 4484,
- 8936, 9107, 9145, 9185, 9454, 10068, 10075, 11730, 13550, 14043, 17809, 17839
- 2) increase in values 7574, 7770, 7773, 7930, 7975, 8020

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The polypeptide profiles positive for BSE compared to normal levels also varied by whether mere increase/presence/absence/decrease of specified proteins is indicative of BSE, and this is not the same profile as that of CJD levels.

Thus, the quantity of experimentation necessary to fulfill the broad scope of the instant claims, i.e., that any/all forms of TSE can be differentiated from any/all other diseases or can be diagnosed by determining that a mere increase/presence/absence/decrease of nonspecified proteins, constitute merely an invitation to experiment without a reasonable expectation of success.

9. Claims 29-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claim 29 is drawn to "A kit comprising a probe." The remainder of claim 29 is merely intended use and places no structural/functional characteristics on the kit or the probe. Therefore, it is unclear what is the "probe". Claims 30 and 31 depend from claim 29, but do not clarify the issue.

#### Conclusion

- 10. No claims are allowed.
- 11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney P. Swartz, Ph.D., Art Unit 1645, whose telephone number is (571) 272-0865. The examiner can normally be reached on Monday through Thursday from 5:30 AM to 4:00 PM EST.

If attempts to reach the Examiner by telephone are unsuccessful, the examiner's acting supervisor, Albert M. Navarro, can be reached on (571)272-0861.

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The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RODNEY P SWARTZ, PH.D PRIMARY EXAMINER Art Unit 1645

September 2, 2006